

CLAIMS

I claim:

1. An insulating concrete form for receiving poured concrete, comprising:

a first insulating panel formed from expanded foam, having a first interior surface, an upper surface, a lower surface, a proximal end, and a distal end;

a second insulating panel formed from expanded foam, having a second interior surface facing said first interior surface of said first insulating panel, an upper surface, a lower surface, a proximal end, and a distal end; and

at least one tie bracket spanning, connecting, and spacing apart said first insulating panel and said second insulating panel,

wherein said first interior surface and said second interior surface are dimensioned and configured collectively to form a void between said first interior surface and said second interior surface such that a plurality of spaced apart posts, a plurality of spaced apart beams disposed to intersect said posts, and a plurality of webs spanning and joining adjacent said posts and adjacent said beams are formed when said void is filled with poured concrete and the concrete cures, and

wherein said upper surface of first insulating panel has a first interlocking member formed therein and said lower surface of said first insulating panel has a second interlocking member formed therein, wherein said first interlocking member and said second interlocking member are disposed to oppose parallel movement of one said insulating concrete form with respect to a second said insulating concrete form disposed in stacked, interlocked relationship therewith.

2. The insulating concrete form according to claim 1, wherein said void is dimensioned and configured that said posts and said beams are parallelepipeds joined where said posts and said beams intersect one another.

3. The insulating concrete form according to claim 2, wherein said posts and said beams have exterior surfaces disposed parallel and perpendicular to said first insulating panel and said second insulating panel.

4. The insulating concrete form according to claim 1, wherein said first interlocking member is a male interlocking member and said second interlocking member is a female interlocking member, wherein each said female interlocking

member is dimensioned and configured to receive one said male interlocking member in close cooperation therewith, and each said female interlocking member is located in vertical alignment with one said male interlocking member.

5. The insulating concrete form according to claim 1, wherein each said tie bracket which is adjacent to said proximal end of said first insulating panel is vertically longitudinally oriented, and has a vertical center line spaced apart from said proximal end of said first insulating panel by a distance interval which is greater than two inches and less than one foot.

6. The insulating concrete corner form according to claim 5, wherein said distance interval by which said vertical center line is spaced apart from said proximal end of said first insulating panel is a whole number multiple of measurements of one half foot.

7. The insulating concrete form according to claim 1, wherein said at least one tie bracket includes a plurality of tie brackets each having a vertical center line wherein the vertical center line of each said tie bracket is spaced apart from the vertical center line of every adjacent said tie

bracket by a distance interval which is a whole number multiple of measurements of one foot.

8. The insulating concrete form according to claim 1, wherein each said interlocking member has a center which is spaced apart from the center of each adjacent said interlocking member by a distance of one foot.

9. The insulating concrete form according to claim 1, wherein each said interlocking member is greater in length than one inch.

10. The insulating concrete form according to claim 1, wherein said first insulating panel and said second insulating panel both are straight, whereby said insulating concrete form is a straight insulating concrete form.

11. The insulating concrete form according to claim 1, wherein said first insulating panel and said second insulating panel each include a first leg and a second leg disposed at an oblique angle to said first leg, whereby said insulating concrete form is a corner insulating concrete form.

12. The insulating concrete form according to claim 11, wherein said first leg and said second leg of said first insulating panel and said first leg and said second leg of said second insulating panel each have length such that the combined lengths of said first leg and said second leg have a sum total length of four feet.

13. An insulating concrete form for receiving poured concrete, comprising:

a first insulating panel formed from expanded foam, having a first interior surface, an upper surface, a lower surface, a proximal end, and a distal end;

a second insulating panel formed from expanded foam, having a second interior surface facing said first interior surface of said first insulating panel, an upper surface, a lower surface, a proximal end, and a distal end; and

a plurality of tie brackets spanning, connecting, and spacing apart said first insulating panel and said second insulating panel, wherein each said tie bracket is vertically longitudinally oriented and has a vertical center line, and

wherein one said tie bracket is adjacent to said proximal end of said first insulating panel, and said vertical center line of said tie bracket adjacent to said proximal end

is spaced apart from said proximal end by a distance interval of six inches, and

said vertical center line of each said tie bracket is spaced apart from said vertical center line of every adjacent said tie bracket by a distance interval of one foot,

wherein said first interior surface and said second interior surface are dimensioned and configured collectively to form a void between said first interior surface and said second interior surface such that a plurality of spaced apart posts, a plurality of spaced apart beams disposed to intersect said posts, and a plurality of webs spanning and joining adjacent said posts and adjacent said beams are formed when said void is filled with poured concrete and the concrete cures, and

wherein said upper surface of first insulating panel has a male interlocking member formed therein and said lower surface of said first insulating panel has a female interlocking member formed therein, wherein said male interlocking member and said female interlocking member are disposed to oppose parallel movement of one said insulating concrete form with respect to a second said insulating concrete form disposed in stacked, interlocked relationship therewith, wherein each said interlocking member has a center which is spaced apart from the center of each adjacent said

interlocking member by a distance of one foot, and each said interlocking member is two inches long, and

wherein said void is dimensioned and configured that said posts and said beams are parallelepipeds joined where said posts and said beams intersect one another, and said posts and said beams have exterior surfaces disposed parallel and perpendicular to said first insulating panel and said second insulating panel.

14. The insulating concrete form according to claim 13, wherein said first insulating panel and said second insulating panel both are straight, whereby said insulating concrete form is a straight insulating concrete form.

15. The insulating concrete form according to claim 13, wherein said first insulating panel and said second insulating panel each include a first leg and a second leg disposed at an oblique angle to said first leg, whereby said insulating concrete form is a corner insulating concrete form.

16. The insulating concrete form according to claim 15, wherein said first leg and said second leg of said first insulating panel and said first leg and said second leg of said second insulating panel each have length such that the

combined lengths of said first leg and said second leg have a sum total length of four feet.